



Testimony of

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Before the

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Committee on Finance**

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Mr. Chairman and Members of the Committee, I would like to thank you for the opportunity to provide comments on the important role that tax policy has in determining the nation's energy policies and priorities. For decades, tax policy and government subsidies promoted the development and use of petroleum products in transportation fuels. For example, while Henry Ford designed the Model-T to run on ethanol, taxes imposed on alcohol in the early '20s forced a change to gasoline, setting a course of dependency on imported oil that has had tremendous consequences for our economy, our environment and our national security.

The myopic focus on petroleum finally changed in the early '80s, when the Congress created a number of incentives to stimulate the production and use of various alternative fuels. One such fuel, ethanol, has become a critically important gasoline blending component, extending refining capacity, reducing pollution and providing an important economic stimulus to rural America. Thus, I am here to tell this Committee that the federal tax incentive program for ethanol fuels has been a tremendous success story, one that should be extended with modest changes to improve its application and expand its benefit.

The Renewable Fuels Association is the national trade association for the domestic ethanol industry, located in Washington, D.C. Our membership includes ethanol producers and suppliers, gasoline marketers, agricultural organizations and state agencies dedicated to the continued expansion and promotion of fuel ethanol. Today's domestic ethanol industry consists of 56 production facilities located in 20 states with an annual production capacity of 2.1 billion gallons. In 2000, the U.S. ethanol industry produced a record 1.6 billion gallons of high quality, clean burning fuel ethanol. Production capacity continues to expand, particularly among farmer owned cooperatives, the fastest growing segment of our industry.

Background:

Ethanol is a clean, energy efficient, environmentally friendly fuel produced at production facilities that create jobs and economic opportunity for rural communities where they are located. Ethanol is an alcohol produced primarily from grain using a process almost as old as civilization itself. Today, however, ethanol production has come a long way from the wineries of ancient Greece or the stills of Prohibition. Fuel ethanol is produced on a mass scale utilizing millions of bushels of grain annually in a fermentation/distillation process. While the fundamentals of ethanol production have remained constant, the process technology has become quite sophisticated. There are now two general types of processing facilities, known as wet mills and dry mills that produce fuel-grade ethanol in the United States.

Wet mills are also commonly known as corn refineries. These facilities produce starch, ethanol and corn sweeteners, along with corn oil, corn gluten feed and corn gluten meal. Both corn gluten feed and meal are sold into the animal feed market. Dry mills use simpler technology to produce ethanol and distillers dried grains (DDG) that are also sold as a high-quality feed ingredient. So, one of the myths about ethanol production, that it is taking corn and wasting it to produce fuel, is immediately dismissed when you look at the array of products that come out of ethanol plants. Products for both human and animal consumption are co-produced with ethanol. Producing ethanol simply utilizes the relatively low-value starch in the grain while leaving behind vitamins, minerals, fiber, oil and protein to be utilized in higher-value markets.

Ethanol producers continue to improve efficiency. Modern technology makes it possible to build a state-of-the-art, cost-effective dry mill ethanol plant for about \$1.15 per installed gallon of annual production. Most of the new ethanol production capacity consists of farmer-owned dry mills. Technological improvements throughout the industry have driven the cost of producing ethanol down dramatically. A 1986 report by the USDA Office of Energy predicted that the cost of producing ethanol in 1995 would be \$2.11 per gallon. Instead, those costs were about \$1.15 per gallon in 1995, and industry surveys now suggest that the average production cost is in the range of \$0.95 to \$1.10 per gallon.

Ethanol facilities are not only cost effective; they are energy efficient. A recent study by Argonne National Laboratory found that for every 100 BTUs of energy used to produce ethanol, 135 BTUs of ethanol are produced. That is because corn plants are really very efficient solar panels. USDA analysis has found that corn farmers use about half the energy to produce a bushel of corn than they did just 25 years ago. Therefore, the myth that it takes more energy to produce a gallon of ethanol than is contained in the ethanol itself is just that: a myth.

The Argonne report also provides an analysis of ethanol's greenhouse gas emissions compared to gasoline. Using ethanol produces 35-46 percent fewer emissions of greenhouse gases than gasoline for the same distance traveled. If engines are optimized to use ethanol, mileage will increase along with greenhouse gas benefits. Ethanol also reduces emissions of other harmful pollutants like carbon monoxide, and displaces components of gasoline that produce toxic emissions.

Ethanol Tax Incentive Program

Responding to the need for increased domestic energy resources, reduced air pollution from motor vehicles and rural economic stimulus, the Congress has consistently supported tax incentives to encourage the increased production and use of fuel ethanol. Today, refiners and gasoline marketers using 10% ethanol blends pay 13¢ per gallon in excise taxes, a 5.3¢ reduction from the tax paid on straight gasoline.

The federal ethanol program has been an unmitigated success. From just 175 million gallons in 1980, the industry has increased more than ten-fold to 2 billion gallons today. As a result, farmers across the country have received higher prices for their commodities, more than 200,000 jobs have been created in rural America, the U.S. has reduced its oil imports, and most importantly, Americans are breathing cleaner air.

Economic Benefits: The processing of grains for ethanol production provides an important value added market for farmers; helping to raise the value of commodities they produce. As the third largest use of corn behind feed and exports, ethanol production utilizes nearly seven percent of the U.S. corn crop, or over 600 million bushels of corn, adding \$4.5 billion in farm revenue annually. The U.S. Department of Agriculture (USDA) has determined that ethanol production adds 25 – 30¢ to every bushel of corn.

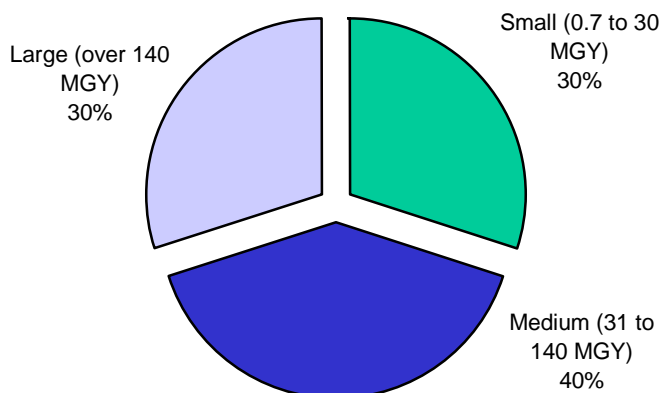
The production of ethanol has sparked new capital investment and economic development in rural communities across America. There has not been an oil refinery built in this country in 25 years. But during that time there have been 56 ethanol refineries built, stimulating rural economies and creating jobs. USDA estimates that a 100 million gallon ethanol production facility will create 2,250 local jobs for a single community.

Industry growth offers enormous potential for overall economic growth and additional employment in local communities throughout the country. According to a Midwestern Governors' Conference report, the economic impact of the demand for ethanol:

- Adds \$4.5 billion to farm revenue annually
- Boosts total employment by 195,200 jobs
- Increases state tax receipts by \$450 million
- Improves the U.S. balance of trade by \$2 billion
- Results in \$3.6 billion in net savings to the federal Treasury

The majority of growth in the industry in the last several years has been the result of farmer ownership of ethanol production facilities. These highly efficient dry mill plants typically go from the drawing board to production in less than two years. Today, farmer-owned cooperatives account for one-third of all U.S. fuel ethanol production. Cooperatives help to ensure farmer members a value-added market for their crops and offer profit sharing dividends as the industry prospers.

U.S. Ethanol Production Capacity



Continued progress is being made in the development of new enzymes and production processes that will allow for the cost-effective production of ethanol from cellulose. These feedstocks offer tremendous opportunities for new jobs and economic growth outside the traditional “grain belt,” as well as additional environmental benefits through the reduction of greenhouse gases.

Environment & Public Health: Ethanol, a high-octane, high-value fuel, continues to be one of the best tools we have to fight pollution from vehicles. As an oxygenate (ethanol contains 35% oxygen), ethanol enables a more complete combustion of fuel. The use of ethanol reduces emissions of all the major pollutants regulated by the U.S. Environmental Protection Agency, including carbon monoxide, particulate matter, exhaust volatile organic compounds and hydrocarbons. Ethanol is also an effective tool for reducing air toxics in gasoline, many of which the EPA classifies as known or probable human carcinogens.

As a renewable fuel, ethanol can dramatically reduce greenhouse gas emissions, such as carbon dioxide, a contributor to global warming. Argonne National Laboratory concluded ethanol produced from Midwest corn reduces greenhouse gases by 35-46% compared with gasoline, and the number rises with cellulose ethanol production.

Ethanol is a safe, biodegradable fuel that does not pose an environmental or public health threat to water or soil, and has been awarded a “clean bill of health” by the California Environmental Policy Council.

Consumers Benefit: The availability of ethanol expands our fuel supplies, increasing competition in the marketplace and reducing overall gasoline prices paid by the driving public. As noted by the consumer group, Citizen Action, “the use of ethanol, a domestically-produced, cleaner-burning renewable fuel helps American consumers use less polluting oil and reduces dependence on costly oil imports.”

The federal ethanol program encourages gasoline marketers and blenders to use ethanol by providing a tax reduction. As noted above, gasoline marketers and blenders that use ethanol

are eligible for up to a 5.3 cent per gallon reduction from the federal excise tax on gasoline of 18.3 cents/gallon. The incentive, in turn, has enabled smaller, independent gasoline marketers to compete with the major international petroleum companies and provide consumers with an exceptionally cost-competitive fuel. Consider this statement by the Society of Independent Gasoline Marketers of America:

“The tax benefits afforded ethanol-blended fuels constitute an important means by which independent marketers reduce their costs of product... enhancing independent marketers’ ability to price compete with their economically more powerful, integrated competitors. Such price competition has consistently restrained retail market prices and thereby generated substantial benefits for consumers of gasoline.”

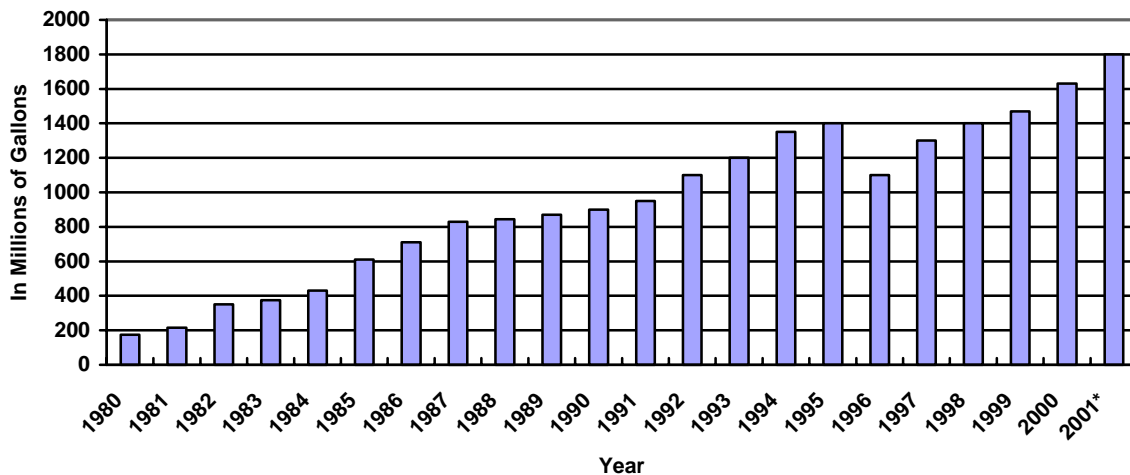
Consumers benefit further because reduced farm program costs and increased income tax revenue attributable to the federal ethanol program provides a net savings to the U.S. Treasury of \$3.6 billion a year. Indeed, for every dollar invested by the federal government to stimulate ethanol production and use, approximately \$7 is returned to the treasury in tax revenue and savings from reduced government outlays.

Energy Security: The need for domestically produced energy supplies has never been greater. Today we are more reliant than ever before on foreign nations to supply our insatiable and growing appetite for oil, importing 54% of our petroleum. At the same time, U.S. oil production has fallen to the lowest point in 30 years. Furthermore, the continued high price of crude oil and lack of U.S. refining capacity exacerbate an already tight energy supply. The U.S. petroleum refining industry is operating at full capacity in an attempt to satisfy current demand, which continues to outpace supply. By importing more refined petroleum products than ever before, the U.S. is sending value-added refining jobs overseas. Meanwhile, demand for refined products will continue to grow.

According to the National Petrochemical & Refiners Association, “The U.S. is gravitating toward a situation in which demand for refined products is overtaking the capability of traditional supply sources.... With existing refining capacity essentially full, the U.S. will have to find additional sources to cover the incremental demand.” As a domestic, renewable source of energy, ethanol can increase fuel supplies, reduce our dependence on foreign oil and increase the United States’ ability to control its own security and economic future.

Ethanol can and should be a more consistent partner with domestic oil companies to provide the incremental additional supplies that are obviously needed. Ethanol is blended with gasoline after the refinery process. Therefore, blending ethanol adds additional volume to the transportation fuel market and helps ease the burden on a refinery sector that barely has the capacity to meet current demand and has no hope for quick expansion. The ethanol industry is producing at a record pace. In 2001 we will again shatter all previous production records. And the ethanol industry can double production within two years to meet new demand created by a phase out of MTBE. We are prepared to meet the challenge of providing increased fuel supplies - today.

U.S. Fuel Ethanol Production



The outlook for the ethanol industry is indeed bright, and the industry is expanding rapidly to meet new market demand for clean, renewable fuels. In addition to the over 2 billion gallons of current production capacity, 34 existing ethanol plants are undergoing expansion and eleven new plants are under construction. As a result, the ethanol industry expects to have an additional 300 million gallons of production capacity on line by the end of this year alone. In fact, a total of 3.5 billion gallons of production capacity will be available by the end of 2003.

Current and Future Annual Ethanol Industry Capacity

Current Ethanol Production Capacity:	2.1 billion gallons (56 plants)
On-going Expansions to Existing Plants:	235 million gallons (34 plants)
Plants Currently Under Construction:	210 million gallons (11 plants)
Approved Construction:	590 million gallons (16 plants)
Other Construction Scheduled for 2001/2002:	465 million gallons (25 plants)

Total Projected Ethanol Production

Capacity by end of 2003: 3.0 billion gallons

Such rapid expansion in ethanol is necessary to meet the growing demand for alternatives to MTBE, a petroleum-based oxygenate that is contaminating drinking water supplies in many parts of the country. Whether by legislation, litigation or consumer preference, it is increasingly apparent that the future use of MTBE will be significantly curtailed. The ethanol industry is preparing to meet that increased demand so that air quality will not suffer as communities address their water quality concerns.

Moreover, as the Congress contemplates a comprehensive energy policy, it is clear that the demand for renewable fuels like ethanol will grow. Several bills have been introduced to

create a national renewable fuel standard, requiring refiners to use an increasing level of alternative fuels.¹

The Federal Ethanol Program is a Success and should be Extended: The importance of ethanol as an alternative fuel to the nation's economy has never been greater, and its value promises to grow even larger. Oil prices are again playing havoc with the American economy. The U.S. economy is facing the most significant period of sluggish growth in more than a decade and high oil prices are a major contributor to the current economic slowdown. Most major economic indicators have posted declines for at least three consecutive months; sales of autos and both new and existing houses are weakening; layoffs are mounting across a broad range of industries; corporate profit reports continue to disappoint the market; and many economic analysts are trimming their forecasts of real growth for 2001.

High oil prices increase the cost of doing business for virtually all firms and drain additional money from consumers' pocketbooks. The lack of a comprehensive energy policy in the U.S. has led to falling domestic production of petroleum and natural gas; near record levels of capacity utilization in refining; and increased dependency on imported oil, which has, in turn, placed American consumers more at risk to the arbitrary decisions of the world's oil exporters. Now is the time to re-double our efforts to promote the increased production and use of domestic, renewable fuels such as ethanol.

In recognition of ethanol's economic, environmental and energy security benefits, the national energy policy report released by the Administration last month included a recommendation to extend the ethanol tax incentive program. Senator Jean Carnahan (D-MO) has introduced S. 907 to extend the tax incentive program to 2015. As the U.S. ethanol industry continues to grow, many investors are looking for such a commitment on the part of the Congress before moving forward with certain projects. The incentive is currently set to expire in 2007. For a plant beginning construction next year, with production slated to begin in 2003, there will only be 4 years to recoup a sizeable investment. Now is absolutely the time for the Congress to extend the federal ethanol program, or make it permanent.

The Renewable Fuels Association strongly urges the Committee to consider extending the federal ethanol tax incentive program as it considers comprehensive energy policy legislation this year.

Small Producer Tax Credit

Under present law, a small ethanol producer (annual production capacity of 30,000,000 gallons or less) is eligible for an income tax credit of 10 cents per gallon on up to 15,000,000 gallons of alcohol production. While intended to stimulate expanded production, particularly by small farmer-owned facilities, the credit is not readily available to cooperatives or their patrons. Furthermore, for all small producers, the credit is subject to a number of limitations that reduce its benefit or limit its availability.

¹ See S.670, introduced by Senators Tom Daschle (D-SD) and Dick Lugar (R-IN), S. 1006, introduced by Senators Chuck Hagel (R-NE) and Tim Johnson (D-SD); and H.R. 2423, introduced by Representative John Thune (R-SD).

Several bills² have been introduced, including S. 312, the Tax Empowerment and Relief for Farmers and Fishermen Act, by Senator Grassley that would address the current limitations of the small producer credit and make it more usable for farmer-owned cooperatives. Indeed, this provision has been approved by the Senate on three separate occasions, but never included in a final bill.

The Renewable Fuels Association enthusiastically supports the effort to address the small producer credit, and encourages the Committee to include this provision in legislation to be enacted this year.

Highway Trust Fund

The Transportation Equity Act for the 21st Century (TEA-21), Public Law 105-178, is the principal Federal legislation authorizing federal highway programs for the six-year period from FY1998 – FY 2003. Enacted on June 9, 1998, TEA-21 provides significant new funding for highway programs, highway safety, and mass transit.

TEA-21 provides a record \$218 billion for highway and transit programs. This represents a 40% increase over highway funds provided under the previous highway legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA). TEA-21 also guaranteed that \$162 billion generated by highway user fees would be spent on highway programs. Under TEA-21, 49 states have received record increases in highway funding.

In order to encourage the use of renewable fuels, Congress has provided blends of gasoline and ethanol a lower rate of tax than that imposed on gasoline. Since federal motor fuel taxes are a primary source of funding for highway programs, the issue has arisen as to the revenue impact of ethanol-blended fuels on Federal highway aid to States.

Although motor fuel containing ethanol does generate less revenue into the Highway Trust Fund, gasohol sales do not reduce funding for the majority of Highway-aid programs. This is because the funding states receive for these programs are based on criteria other than highway user fees from ethanol.

Funding for nine out of the eleven major highway apportionments are determined by statutory formulas of which ethanol tax receipts are not a factor. Two highway-aid programs, the Surface Transportation Program and Minimum Guarantee Program, are to some extent affected by a state's contributions to the Highway Account of the Highway Trust Fund. However, even for these categories, the amount of receipts or contributions a state pays into the Trust Fund does not exclusively determine the amount of funding received back from the Federal government.

Even with ethanol usage, highway revenues have increased beyond original projections, thus enabling increased funding for Federal-aid highway programs. The Revenue Aligned Budget Authority (RABA) has triggered an additional \$1.5 billion in FY 2000 and \$3.2 billion

² See also, H.R. 1999 by Congressman Jim Nussle (R-IA), H.R. 1636 by Congressman John Thune (R-SD), S. 907 by Senator Jean Carnahan (D-MO) and S. 613 by Senator Peter Fitzgerald (R-IL).

in FY 2001. An additional \$4 billion in RABA funding is expected to be available in fiscal year 2002.

Gasohol's contribution to the Highway Account would be higher if all of the gasohol tax receipts remained in the Highway Account of the Trust Fund. However, for every gallon of gasoline blended with 10% ethanol, 5.46 cents of the 13.1 cent tax is diverted from the Highway Account, with 2.86 cents going to the Mass Transit Account, 0.1 cents going to the Leaking Underground Storage Tank Trust Fund, and 2.5 cents diverted to the General Fund for deficit reduction purposes. This diversion is resulting in more revenue being lost to the Highway Account than the total amount of the ethanol tax incentive itself.

The Renewable Fuels Association believes that states should not be penalized for acting on the federal government's desire to increase the production and use of ethanol. Thus, we support transferring the 2.5¢ currently directed toward deficit reduction back to the Highway Trust Fund.

Conclusion

Congress has enabled the domestic renewable fuels industry to develop by supporting tax policies that encourage refiners and gasoline marketers to utilize ethanol. The program has been a tremendous success. It has provided an economic stimulus to rural America, created jobs, reduced our dependence on imported energy and improved our balance of trade, and lowered auto emissions in our nation's cities. The program should be extended to encourage additional investment and growth. But the program should also be altered to allow farmer-owned cooperatives to more effectively access the small producer incentives, and concerns about the impact of reduced HTF payments attributable to ethanol fuels should be addressed.

Thank you.